

By



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,394	01/09/2004	Eduard Karel De Jong	06502.0555-01000	7898

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EXAMINER
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RAMAKRISHNAIAH, MELUR

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/753,394	<b>Applicant(s)</b> DE JONG, EDUARD KAREL	
	<b>Examiner</b> Melur Ramakrishnaiah	<b>Art Unit</b> 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 41-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41-47, 51-62, 66-82 and 86-90 is/are rejected.
- 7) ☐ Claim(s) 48-50, 63-65 and 83-85 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-13-04, 3-22-04, 4-28-04, 8-29-05</u> | 6) <input type="checkbox"/> Other: _____  |

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 41-90 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-40 of copending Application No. 09/806,279. Although the conflicting claims are not identical, they are not patentably distinct from each other because 71 of the present application is an obvious variation of claim 1 of copending Application No. 09/806,279.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 41, 43, 51-55, 56, 58, 66-70, 71, 72-73, 74-75, 76, 78, 86-90, are rejected under 35 U.S.C 102(b) as being anticipated by Moses et al. (US PAT: 4,425,642, hereinafter Moses).

Regarding claim 41, Moses discloses a method of transmitting data messages between a first communication device and a second communication device that exchange voice messages over a communication channel, the method comprising: establishing a communication session between the first and second communication devices over the communication channel (this step is implicit in as much as the reference teaches transmitting voice and data in a co channel, see abstract), transmitting data signals from the first device (fig. 3) to the second device during the establishing step, and exchanging voice messages between the first and second devices over the communication channel (not shown) during the communication session, wherein the digital data includes a sequence of unique signals comprising a predetermined number of basic signals having a fixed frequency and a unique amplitude (col. 3 lines 50-55, col. 4, line 39 – col. 7, line 18).

Regarding claim 56, Moses discloses a system for transmitting data messages comprising: a first device as shown in fig. 3, a second device as shown in fig. 4, and a communication channel interconnecting the first and second devices for exchanging voice messages between the first and second devices, wherein the first and second devices are configured to establish communication session over the communication channel, exchange voice messages over the communication channel during the communication session, and transmit digital data over the communication channel, the

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digital data including a sequence of unique signals comprising a predetermined number of basic signals each having a fixed frequency and a unique amplitude (col. 3 lines 50-55, col. 4, line 39 – col. 7, line 18).

Regarding claim 71, Moses discloses a method for transmitting data messages between devices configured to exchange voice messages over a communication channel, the method comprising: encoding a data message into an arrangement of signals, transmitting the signals over the communication channel from first one of the devices (fig. 3) to a second device (fig. 4) while the communication channel is configured to exchange voice messages, decoding the signals into the data message, and executing a program either indicated by or included in a data message (col. 3 lines 50-55, col. 4, line 39 – col. 7, line 18).

Regarding claim 72, Moses discloses a method for receiving a data message transmitted by a remote device over a communication channel that is used to exchange voice messages, the method comprising: receiving the data message transmitted from the remote device (fig. 3) over the communication channel as sequence of basic signals during a sequence of fixed time periods, wherein the data message is transmitted by the remote device during a period when the communication channel is available for exchanging the voice messages, decoding the data message to obtain digital data, and processing the digital data based on a corresponding type determined from the digital data (col. 3 lines 50-55, col. 4, line 39 – col. 7, line 18).

Regarding claim 74, Moses discloses a method for transmitting a data message to a remote device over a communication channel that is used to exchange voice

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messages, the method comprising: configuring the data message as digital data including a sequence of basic signals, and transmitting the data message to the remote devices over the channel as a sequence of the basic signals during a sequence of time periods, wherein the data message is transmitted during a period when the communication channel is available for exchanging the voice messages, wherein the remote device decodes the data message based on a corresponding type determined from the digital data (col. 3 lines 50-55, col. 4, line 39 – col. 7, line 18).

Regarding claim 76, Moses discloses a computer-readable medium including instructions for performing a method, when executed by a processor, for transmitting data messages between a first communication device and a second communication device that exchanges voice messages over a communication channel, the method comprising: establishing a communication session between the first and second devices (figs. 3-4) over a communication channel (this step is implicit in as much as the reference teaches transmitting voice and data in a co channel, see abstract), transmitting digital data from the first device to the second device during establishing step, and exchanging voice messages between the first and second devices over the communication channel during the communication session, wherein the digital data includes a sequence of unique signals comprising a first predetermined number of basic signals each having a fixed frequency and a unique amplitude (col. 3 lines 50-55, col. 4, line 39 – col. 7, line 18).

Regarding claims 43, 51-55, 58, 66-70, 73, 75, 78, 86-90, Moses further teaches the following: digital data includes at least one of application program code,

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identification data corresponding to at least one of first and second devices, etc (col. 7 lines 13-18), each unique signal includes a set of basic signals and transmitting digital data includes transmitting unique signals in a sequence of during a corresponding sequence of fixed time periods (col. 5 lines 34-40), decoding, at the second device (fig. 4) , the sequence of unique signals into a sequence of basic data units that form the digital data (col. 6 lines 41-58), communication channel has a noise level and each of the unique amplitudes is within a predetermined range above the noise level, predetermined range is slightly above the noise level of the communication channel (these are implicit in as much as reference teaches transmitting data signals through a communication which, as is well known, has a certain noise level), filtering the basic signals, at the second device (fig. 4), to prevent digital data from reaching the telephone receiver (col. 6 lines 26-35).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 42, 57, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moses in view of Honda et al. (US PAT: 5,657,379, hereinafter Honda).

Regarding claims 42, 57, 77, Moses does not teach the following: sending a dialing from the first device to the second device over the communication channel and

transmitting the digital data from the first device to the second device when sending the dialing signal.

However, Honda discloses data communication apparatus which teaches the following: sending a dialing from the first device to the second device over the communication channel and transmitting the digital data from the first device to the second device when sending the dialing signal (figs. 1-3, col. 3 lines 49-64).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Moses' system to provide for the following: sending a dialing from the first device to the second device over the communication channel and transmitting the digital data from the first device to the second device when sending the dialing signal as this arrangement would provide means for sending signals which identify the type of terminal in connection with communications as taught by Honda.

5. Claims 44, 59, 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moses in view of Tsumura et al. (US PAT: 5,365,576, hereinafter Tsumura)

Regarding claims 44, 45, 79, Moses does not teach the following: transmitting digital data from the first device to the second device during idle periods where no voice messages are exchanges between the first and second devices.

However, Tsumura teaches the following: transmitting digital data from the first device to the second device during idle periods where no voice messages are exchanged between the first and second devices (col. 2, line 61 – col. 3, line 2).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Moses' system to provide for the following:



transmitting digital data from the first device to the second device during idle periods where no voice messages are exchanges between the first and second devices as this arrangement would provide means for transmitting data while speech is not taking place between the communication devices as taught by Tsumura, thus making effective use of communication medium.

6. Claims 45, 60, 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moses in view of Crespo et al. (US PAT: 5,177,768, hereinafter Crespo)

Regarding claims 45, 60, 80, Moses does not teach the following: determining frequency characteristics of the communication channel and determining amplitude of each basic signal based on channels frequency characteristics.

However, Crespo discloses Spread-time code division multiple access technique which teaches the following: filter producing transmission pulses based on frequency domain characteristic of transmission channel so as to optimize signal to noise ratio which implies optimizing/or determining amplitude of the transmission signal based on frequency domain characteristic of transmission channel (col. 8 lines 31-50).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Moses' system to provide for the following: determining frequency characteristics of the communication channel and determining amplitude of each basic signal based on channels frequency characteristics as this arrangement would provide means to optimize signal transmission characteristics as taught by Crespo.

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7. Claims 46, 61, 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moses in view of Jensen et al. (US PAT: 5,764,763, hereinafter Jensen).

Regarding claims 46, 61, 81, Moses does not teach the following: determining the amplitude of each basic signal based on acoustic characteristics of human ear.

However, Jensen teaches the following: determining the amplitude of each basic signal based on acoustic characteristics of human ear (col. 2 lines 43-65).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Moses' system to provide for the following: determining the amplitude of each basic signal based on acoustic characteristics of human ear as this arrangement would provide means to select signal amplitudes to make them inaudible to human ear as taught by Jensen, thus preventing unpleasant experience for the user of the system while data is being transmitted during voice transmission.

8. Claims 47, 62, 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moses in view of Decker et al. (US PAT: 4,757,495, hereinafter Decker).

Regarding claims 47, 62, 82, Moses does not teach the following: sending an identifying message from the first device including an identifier related to the characteristics of the communication session.

However, Decker teaches the following: sending an identifying message from the first device including an identifier related to the characteristics of the communication session (col. 8 lines 41-48).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Moses' system to provide for the following: sending an

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identifying message from the first device including an identifier related to the characteristics of the communication session as this arrangement would facilitate to agree upon required communication parameters for desired communication session as taught by Decker, thus facilitating optimal transmission between comm. Devices.

9. Claims 48-50, 63-65, 83-85 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Melur Ramakrishnaiah  
Primary Examiner  
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